

Statement of Basis of the Federal Operating Permit

BASF Corporation

Site Name: BASF Freeport Site
Area Name: Caprolactam Complex
Physical Location: 602 Copper Rd
Nearest City: Freeport
County: Brazoria

Permit Number: O1926
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

- A description of the facility/area process description;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: March 9, 2017

Operating Permit Basis of Determination

Permit Area Process Description

Caprolactam is produced in two caprolactam process units, Caprolactam 1 (CPL 1) and Caprolactam 2 (CPL 2), via five major process steps. In addition, by-product ammonium sulfate is generated in two of the processing steps. The five major steps are as follows:

- 1) Oximation - Cyclohexane and hydroxylamine (as hydroxyl ammonium sulfate) are reacted to form cyclohexanone oxime. Ammonium sulfate is generated from the neutralization of sulfuric acid with ammonia.
- 2) Rearrangement - The cyclohexanone oxime produced in oximation is converted to crude caprolactam in the presence of oleum via the Beckmann Rearrangement process.
- 3) Neutralization - The oleum in the product mixture resulting from rearrangement is neutralized with ammonia which generates additional ammonium sulfate and liberates crude caprolactam.
- 4) Extraction - By-product impurities generated in the rearrangement step are removed from the crude caprolactam by liquid extraction using benzene as a solvent.
- 5) Distillation - Extract caprolactam is further purified to remove water and light and heavy impurities in a series of distillation towers.

The ammonium sulfate (salt) produced in both the oximation and neutralization step is crystallized. The salt is then centrifuged and dried in the Salt Plant.

FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1536, O1925, O1927, O1928, O2158, O2907, O3826

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO _x , PM, NO _x , HAPs, CO
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Reading State of Texas’ Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements

- Protection of Stratosphere Ozone
 - Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - Permit Shield
 - New Source Review Authorization References
 - Compliance Plan
 - Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for

large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that

cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents is listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
11-1-D156A	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a vapor recovery system (VRS)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> <p>Control Device Type = Catalytic incinerator</p>
11-1-D156A	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia</p> <p>Storage Vessel Description = Closed vent system (CVS) with a flare used as the control device (fixed roof)</p>
14-1-D210A	40 CFR Part 61, Subpart Y	61Y-1	<p>Tank Type = The storage tank stores benzene within the specific gravities defined in 40 CFR § 61.270(a), not including storage tanks used to store benzene at coke by-product facilities, pressure vessels, or vessels permanently attached to a motor vehicles</p> <p>Storage Capacity = Capacity is greater than or equal to 10,000 gallons</p> <p>Stringency = The storage vessel is not subject to the provisions of 40 CFR Part 60, Subparts K, Ka, or Kb</p> <p>Alternate Means of Emission Limitation = Not using an alternate means of emission limitation</p> <p>Tank Description = Closed vent system</p> <p>Control Device Type = Control device other than a flare</p>
14-1-D210B	40 CFR Part 61, Subpart Y	61Y-1	<p>Tank Type = The storage tank stores benzene within the specific gravities defined in 40 CFR § 61.270(a), not including storage tanks used to store benzene at coke by-product facilities, pressure vessels, or vessels permanently attached to a motor vehicles</p> <p>Storage Capacity = Capacity is less than 10,000 gallons</p> <p>Stringency = The storage vessel is not subject to the provisions of 40 CFR Part 60, Subparts K, Ka, or Kb</p> <p>Alternate Means of Emission Limitation = Not using an alternate means of emission limitation</p> <p>Tank Description = Closed vent system</p> <p>Control Device Type = Control device other than a flare</p>
14-1-D823	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is less than or equal to 1,000 gallons</p>
14-1-D823	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p>

Unit ID	Regulation	Index Number	Basis of Determination*
7-1-D745A1	40 CFR Part 61, Subpart Y	61Y-1	<p>Tank Type = The storage tank stores benzene within the specific gravities defined in 40 CFR § 61.270(a), not including storage tanks used to store benzene at coke by-product facilities, pressure vessels, or vessels permanently attached to a motor vehicles</p> <p>Storage Capacity = Capacity is greater than or equal to 10,000 gallons</p> <p>Stringency = The storage vessel is not subject to the provisions of 40 CFR Part 60, Subparts K, Ka, or Kb</p> <p>Alternate Means of Emission Limitation = Not using an alternate means of emission limitation</p> <p>Tank Description = Closed vent system</p> <p>Control Device Type = Control device other than a flare</p>
7-2-D304B	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is less than or equal to 1,000 gallons</p>
7-2-D304B	40 CFR Part 60, Subpart K	60K-1	<p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less</p>
GRP-TANKS1	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
GRP-TANKS1	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>
GRP-TANKS2	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons</p>
GRP-TANKS2	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia</p>
GRP-TANKS3	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
GRP-TANKS3	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p>
GRP-TANKS4	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using an internal floating roof (IFR)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
GRP-TANKS4	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia</p> <p>Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal</p>
GRP-TANKS7	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
GRP-TANKS7	40 CFR Part 60, Subpart K	60K-1	<p>Construction/Modification Date = On or before June 11, 1973</p>
GRP-TANKS9	30 TAC Chapter 115, Storage of VOCs	115B-1	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-TANKS9	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
11-1-TLDG	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Control Device Type = No control device. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
1-1-BARGE	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Facility Type = Marine terminal Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Marine Terminal Exemptions = The marine terminal is claiming one or more of the exemptions in 30 TAC § 115.217(a)(5)(B). Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
1-1-BARGE	30 TAC Chapter 115, Loading and Unloading of VOC	115C-2	Chapter 115 Control Device Type = No control device. Chapter 115 Facility Type = Marine terminal Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Marine Terminal Exemptions = The marine terminal is claiming one or more of the exemptions in 30 TAC § 115.217(a)(5)(B). Transfer Type = Only unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(B), (b)(3)(B), (a)(2)(A), and (b)(3)(A) exemptions do not apply to marine terminals or gasoline terminals. Uncontrolled VOC Emissions = Uncontrolled VOC emissions are less than 100 tpy.
14-1-BENZLD	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading.

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>
7-1-BENZLD	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	<p>Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Loading and unloading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>
GRP-LOAD1	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>
GRP-LOAD2	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Loading and unloading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>
GRP-LOAD3	30 TAC Chapter 115, Loading and Unloading of VOC	115C-1	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only unloading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>
11-1-BR170	30 TAC Chapter 117, Subchapter B	117B-1	<p>Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS. NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average NOx Reduction = No NO _x control method Fuel Type #1 = Natural gas NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] Annual Heat Input = Annual heat input is greater than 2.8(10 ¹¹) Btu/yr, based on a rolling 12-month average. NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
GRP-HEATERS	30 TAC Chapter 117, Subchapter B	117B-1	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr. CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS. NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average NOx Reduction = No NO _x control method Fuel Type #1 = Natural gas NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
12-1-FL241	30 TAC Chapter 111, Visible Emissions	111A-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
12-1-FL241	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
12-1-FL241	40 CFR Part 63, Subpart A	63A-1	Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.
GRP-FLARES	30 TAC Chapter 111, Visible Emissions	111A-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
GRP-FLARES	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-FLARES	40 CFR Part 63, Subpart A	63A-1	Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.
11-1-FDIST	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	<p>Agitators = The fugitive unit does not contain agitators.</p> <p>Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358.</p> <p>Compressor Seals = The fugitive unit contains compressor seals.</p> <p>Flanges = The fugitive unit contains flanges.</p> <p>Open-ended Valves = The fugitive unit contains open-ended valves.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Process Drains = The fugitive unit does not have process drains.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p> <p>Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.</p> <p>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.</p> <p>Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested.</p> <p>Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.</p> <p>Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.</p> <p>50% by Volume = Compressors are in hydrogen service and the hydrogen content can be reasonably expected to always exceed 50% by volume.</p> <p>Complying with § 115.352(1) = Valves are complying with § 115.352(1).</p> <p>Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1).</p> <p>Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1).</p> <p>Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.</p> <p>Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal.</p> <p>TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.</p> <p>Shaft Seal System = Compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.</p> <p>TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).</p> <p>TVP of Process Fluid VOC ≤ 0.044 PSIA AT 68° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying With § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).</p>
11-1-FDIST	40 CFR Part 60, Subpart VV	60VV-1	<p>Closed Vent (or Vapor Collection) Systems = The fugitive unit does not contain closed vent or vapor collection systems.</p> <p>Compressors = The fugitive unit contains compressors.</p> <p>Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices.</p> <p>Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service.</p> <p>Flare = The fugitive unit does not contain flares.</p> <p>Pressure Relief Devices in Heavy or Light Liquid Service = Fugitive unit contains pressure relief devices in heavy or light liquid service.</p> <p>Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.</p> <p>Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service.</p> <p>Sampling Connection Systems = The fugitive unit does not contain sampling connection systems.</p> <p>Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service.</p> <p>Vapor Recovery System = The fugitive unit does not contain vapor recovery systems.</p> <p>2.0% = The fugitive unit is not complying with an allowable percentage of valves leaking equal to or less than 2.0%.</p> <p>Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2).</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for pressure relief devices in heavy or light liquid service.</p> <p>Vacuum Service = The fugitive unit contains equipment in vacuum service.</p> <p>Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service.</p> <p>VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year.</p> <p>Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV.</p> <p>Complying with 40 CFR § 60.482-3 = Compressors are complying with § 60.482-3.</p> <p>Complying with 40 CFR § 60.482-8 = Pressure relief devices in heavy or light liquid service are complying with the requirements of § 60.482-8.</p> <p>Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service.</p> <p>Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7.</p> <p>Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service.</p> <p>Flanges and Other Connectors = The fugitive unit contains flanges and other connectors.</p> <p>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.</p> <p>Pressure Relief Devices in Gas/Vapor Service = The fugitive unit contains pressure relief devices in gas/vapor service.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for open-ended valves or lines.</p> <p>Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials.</p> <p>Beverage Alcohol Production = The facility does not produce only beverage alcohol.</p> <p>Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2.</p> <p>Complying with 40 CFR § 60.482-6 = Open-ended valves or lines are complying with § 60.482-6.</p> <p>Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8.</p>
11-1-FNH3	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	Title 30 TAC § 115.352 Applicable = Site is not a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process nor a natural gas/gasoline processing operation as defined in 30 TAC 115.10.
11-1-FNH3	40 CFR Part 60, Subpart VV	60VV-1	Produces Chemicals = The fugitive unit is not part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.
11-1-FOXID	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	<p>Agitators = The fugitive unit does not contain agitators.</p> <p>Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358.</p> <p>Compressor Seals = The fugitive unit contains compressor seals.</p> <p>Flanges = The fugitive unit contains flanges.</p> <p>Open-ended Valves = The fugitive unit contains open-ended valves.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Process Drains = The fugitive unit does not have process drains.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p> <p>Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.</p> <p>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.</p> <p>Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested.</p> <p>Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.</p> <p>Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.</p> <p>50% by Volume = Compressors are not in hydrogen service or are in hydrogen service and the hydrogen content cannot be reasonably expected to always exceed 50% by volume.</p> <p>Complying with § 115.352(1) = Valves are complying with § 115.352(1).</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1).</p> <p>Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1).</p> <p>Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.</p> <p>Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal.</p> <p>TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.</p> <p>Shaft Seal System = Compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.</p> <p>TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).</p> <p>TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying With § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).</p>
11-1-FOXID	40 CFR Part 60, Subpart VV	60VV-1	<p>Closed Vent (or Vapor Collection) Systems = The fugitive unit does not contain closed vent or vapor collection systems.</p> <p>Compressors = The fugitive unit contains compressors.</p> <p>Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices.</p> <p>Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service.</p> <p>Flare = The fugitive unit does not contain flares.</p> <p>Pressure Relief Devices in Heavy or Light Liquid Service = Fugitive unit contains pressure relief devices in heavy or light liquid service.</p> <p>Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.</p> <p>Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service.</p> <p>Sampling Connection Systems = The fugitive unit does not contain sampling connection systems.</p> <p>Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service.</p> <p>Vapor Recovery System = The fugitive unit does not contain vapor recovery systems.</p> <p>2.0% = The fugitive unit is not complying with an allowable percentage of valves leaking equal to or less than 2.0%.</p> <p>Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2).</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for pressure relief devices in heavy or light liquid service.</p> <p>Vacuum Service = The fugitive unit contains equipment in vacuum service.</p> <p>Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service.</p> <p>VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV.</p> <p>Complying with 40 CFR § 60.482-3 = Compressors are complying with § 60.482-3.</p> <p>Complying with 40 CFR § 60.482-8 = Pressure relief devices in heavy or light liquid service are complying with the requirements of § 60.482-8.</p> <p>Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service.</p> <p>Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7.</p> <p>Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service.</p> <p>Flanges and Other Connectors = The fugitive unit contains flanges and other connectors.</p> <p>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.</p> <p>Pressure Relief Devices in Gas/Vapor Service = The fugitive unit contains pressure relief devices in gas/vapor service.</p> <p>Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for open-ended valves or lines.</p> <p>Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials.</p> <p>Beverage Alcohol Production = The facility does not produce only beverage alcohol.</p> <p>Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2.</p> <p>Complying with 40 CFR § 60.482-6 = Open-ended valves or lines are complying with § 60.482-6.</p> <p>Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8.</p>
7-2-FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	<p>Agitators = The fugitive unit does not contain agitators.</p> <p>Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358.</p> <p>Compressor Seals = The fugitive unit does not contain compressor seals.</p> <p>Flanges = The fugitive unit contains flanges.</p> <p>Open-ended Valves = The fugitive unit contains open-ended valves.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Process Drains = The fugitive unit does not have process drains.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p> <p>Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.</p> <p>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.</p> <p>Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested.</p> <p>Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.</p> <p>Complying with § 115.352(1) = Valves are complying with § 115.352(1).</p> <p>Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1).</p> <p>Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1).</p> <p>Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.</p> <p>Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal.</p> <p>TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).</p> <p>TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.</p>
7-2-FUG	40 CFR Part 60, Subpart VV	60VV-1	<p>Closed Vent (or Vapor Collection) Systems = The fugitive unit does not contain closed vent or vapor collection systems.</p> <p>Compressors = The fugitive unit does not contain compressors.</p> <p>Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices.</p> <p>Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service.</p> <p>Flare = The fugitive unit does not contain flares.</p> <p>Pressure Relief Devices in Heavy or Light Liquid Service = Fugitive unit contains pressure relief devices in heavy or light liquid service.</p> <p>Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.</p> <p>Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service.</p> <p>Sampling Connection Systems = The fugitive unit does not contain sampling connection systems.</p> <p>Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service.</p> <p>Vapor Recovery System = The fugitive unit does not contain vapor recovery systems.</p> <p>2.0% = The fugitive unit is not complying with an allowable percentage of valves leaking equal to or less than 2.0%.</p> <p>Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2).</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for pressure relief devices in heavy or light liquid service.</p> <p>Vacuum Service = The fugitive unit contains equipment in vacuum service.</p> <p>Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service.</p> <p>VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV.</p> <p>Complying with 40 CFR § 60.482-8 = Pressure relief devices in heavy or light liquid service are complying with the requirements of § 60.482-8.</p> <p>Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service.</p> <p>Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7.</p> <p>Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service.</p> <p>Flanges and Other Connectors = The fugitive unit contains flanges and other connectors.</p> <p>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.</p> <p>Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for open-ended valves or lines.</p> <p>Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials.</p> <p>Beverage Alcohol Production = The facility does not produce only beverage alcohol.</p> <p>Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2.</p> <p>Complying with 40 CFR § 60.482-6 = Open-ended valves or lines are complying with § 60.482-6.</p> <p>Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8.</p>
GRP-FUGS1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	<p>Agitators = The fugitive unit contains agitators.</p> <p>Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358.</p> <p>Compressor Seals = The fugitive unit does not contain compressor seals.</p> <p>Flanges = The fugitive unit contains flanges.</p> <p>Open-ended Valves = The fugitive unit contains open-ended valves.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Process Drains = The fugitive unit does not have process drains.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p> <p>Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.</p> <p>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.</p> <p>Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested.</p> <p>Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.</p> <p>Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.</p> <p>Complying with § 115.352(1) = Valves are complying with § 115.352(1).</p> <p>Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1).</p> <p>Complying With § 115.352(1) = Agitators are complying with § 115.352(1).</p> <p>Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1).</p> <p>Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.</p> <p>Shaft Seal System = Pump seals are not equipped with a shaft seal system that prevents or detects emission of VOC from the seal.</p> <p>TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).</p> <p>TVP of Process Fluid VOC > 0.044 psia at 68° F = No agitators contact a process fluid with a TVP greater than 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.</p>
GRP-FUGS1	40 CFR Part 60, Subpart VV	60VV-1	<p>Closed Vent (or Vapor Collection) Systems = The fugitive unit does not contain closed vent or vapor collection systems.</p> <p>Compressors = The fugitive unit does not contain compressors.</p> <p>Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices.</p> <p>Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service.</p> <p>Flare = The fugitive unit does not contain flares.</p> <p>Pressure Relief Devices in Heavy or Light Liquid Service = Fugitive unit contains pressure relief devices in heavy or light liquid service.</p> <p>Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.</p> <p>Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service.</p> <p>Sampling Connection Systems = The fugitive unit does not contain sampling connection systems.</p> <p>Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service.</p> <p>Vapor Recovery System = The fugitive unit does not contain vapor recovery systems.</p> <p>2.0% = The fugitive unit is not complying with an allowable percentage of valves leaking equal to or less than 2.0%.</p> <p>Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2).</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for pressure relief devices in heavy or light liquid service.</p> <p>Vacuum Service = The fugitive unit contains equipment in vacuum service.</p> <p>Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year.</p> <p>Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV.</p> <p>Complying with 40 CFR § 60.482-8 = Pressure relief devices in heavy or light liquid service are complying with the requirements of § 60.482-8.</p> <p>Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service.</p> <p>Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7.</p> <p>Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service.</p> <p>Flanges and Other Connectors = The fugitive unit contains flanges and other connectors.</p> <p>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.</p> <p>Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service.</p> <p>Equivalent Emission Limitation = No equivalent emission limitation is used for open-ended valves or lines.</p> <p>Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials.</p> <p>Beverage Alcohol Production = The facility does not produce only beverage alcohol.</p> <p>Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2.</p> <p>Complying with 40 CFR § 60.482-6 = Open-ended valves or lines are complying with § 60.482-6.</p> <p>Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8.</p>
GRP-FUGS2	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115D-1	<p>Agitators = The fugitive unit does not contain agitators.</p> <p>Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358.</p> <p>Compressor Seals = The fugitive unit does not contain compressor seals.</p> <p>Flanges = The fugitive unit contains flanges.</p> <p>Open-ended Valves = The fugitive unit contains open-ended valves.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Process Drains = The fugitive unit does not have process drains.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p> <p>Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.</p> <p>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.</p> <p>Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested.</p> <p>Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.</p> <p>Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>40 CFR § 63.169.</p> <p>Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.</p> <p>Complying with § 115.352(1) = Valves are complying with § 115.352(1).</p> <p>Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1).</p> <p>Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1).</p> <p>Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.</p> <p>Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal.</p> <p>TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC ≤ 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC ≤ 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).</p> <p>TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.</p>
GRP-FUGS2	40 CFR Part 63, Subpart FFFF	63FFFF-1	Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit.
GRP-FUGS2	40 CFR Part 63, Subpart H	63H-1	<p>ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT</p> <p>ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT</p> <p>BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE</p> <p>ENCLOSED-VENTED PROCESS UNIT AMEL = UNIT DOES NOT CONTAIN A TOTALLY ENCLOSED VENTED PROCESS UNIT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION IN § 63.179</p> <p>EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT</p> <p>LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT</p> <p>NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES</p> <p>RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT</p> <p>UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT</p> <p>ANY (INSTRUMENTATION SYSTEMS) = COMPONENT NOT PRESENT</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>BATCH PROCESS AMEL = UNIT DOES NOT CONTAIN A BATCH PROCESS UNIT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION IN § 63.178</p> <p>DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT</p> <p>QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS</p> <p>VACUUM SERVICE = ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE</p> <p>ANY (COMPRESSORS) = COMPONENT NOT PRESENT</p> <p>EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS</p> <p>ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT</p> <p>LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR</p> <p>ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT</p> <p>GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT</p> <p>QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES</p> <p>AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL)</p> <p>FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT</p> <p>GENERAL AMEL = UNIT IS NOT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION UNDER § 63.177</p> <p>HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT NOT PRESENT</p> <p>LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT</p> <p>ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT NOT PRESENT</p> <p>UNITS WITHOUT AMEL = FUGITIVE UNIT EQUIPMENT OR PROCESS UNITS ARE NOT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION.</p>
GRP-TOWERS	40 CFR Part 63, Subpart Q	63Q-1	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
11-1-100	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor combustor not considered to be a flare.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			under the rule.
11-1-100	30 TAC Chapter 115, Vent Gas Controls	115B-2	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor combustor not considered to be a flare.</p> <p>Vent Type = Vent gas stream is emitted from an air oxidation synthetic organic chemical manufacturing process.</p>
11-1-100	30 TAC Chapter 115, Vent Gas Controls	115B-3	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Control Device Type = Vapor combustor not considered to be a flare.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p>
11-1-101	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
11-1-101	30 TAC Chapter 115, Vent Gas Controls	115B-2	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p>
11-1-2	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Chiller or catalytic incinerator.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p>
11-1-2	30 TAC Chapter 115, Vent Gas Controls	115B-2	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Chiller or catalytic incinerator.</p> <p>Vent Type = Vent gas stream is emitted from an air oxidation synthetic organic chemical manufacturing process.</p>
11-1-2	30 TAC Chapter 115, Vent Gas Controls	115B-3	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Control Device Type = Chiller or catalytic incinerator.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
12-1-35	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
14-1-58	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
14-1-V310B	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
14-1-V310B	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
14-1-V310B	40 CFR Part 63, Subpart FFFF	63FFFF-1	<p>Emission Standard = The vent stream is Group 2 (not designated as Group 1 and determined to not be Group 1).</p> <p>Recovery Device = The TRE index is maintained without a recovery device.</p>
7-1-48	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
7-1-48	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
7-1-61	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = A continuous emissions monitoring system (CEMS) capable of measuring the opacity of emissions is installed in the vent in accordance with 30 TAC § 111.111(a)(1)(C).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
7-1-61	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-VENTS1	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRP-VENTS10	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p>
GRP-VENTS10	40 CFR Part 63, Subpart FFFF	63FFFF-1	<p>Emission Standard = The vent stream is Group 2 (not designated as Group 1 and determined to not be Group 1).</p> <p>Recovery Device = The TRE index is maintained without a recovery device.</p>
GRP-VENTS11	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-VENTS11	40 CFR Part 63, Subpart FFFF	63FFFF-1	<p>Emission Standard = The vent stream is Group 2 (not designated as Group 1 and determined to not be Group 1).</p> <p>Recovery Device = The TRE index is maintained using a recovery device.</p> <p>Existing Source = The source is an existing source (commenced construction on or before April 4, 2002).</p> <p>TRE Index Threshold = The TRE index is greater than the applicable threshold (i.e., 5.0 for existing source or 8.0 for new source).</p>
GRP-VENTS12	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRP-VENTS13	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Control Device Type = Chiller or catalytic incinerator.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
GRP-VENTS13	40 CFR Part 63, Subpart FFFF	63FFFF-1	<p>Designated Grp1 = The emission stream is designated as Group 1.</p> <p>Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i.</p> <p>Hal Device Type = No halogen scrubber or other halogen reduction device is used.</p> <p>Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2).</p> <p>Small Device = A small control device (defined in § 63.2550) is not being used.</p> <p>Designated Hal = The emission stream is not designated as halogenated.</p> <p>Prior Eval = The data from a prior evaluation or assessment is used.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Determined Hal = The emission stream is determined to be non-halogenated.</p> <p>Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested.</p> <p>Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.</p> <p>Bypass Line = Bypass lines are monitored by flow indicators.</p> <p>CEMS = A CEMS is not used.</p> <p>SS Device Type = Catalytic incinerator.</p>
GRP-VENTS13	40 CFR Part 63, Subpart FFFF	63FFFF-2	<p>Designated Grp1 = The emission stream is designated as Group 1.</p> <p>Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet a ppmv standard per § 63.2455(a) - Table 1.1.a.i.</p> <p>Hal Device Type = No halogen scrubber or other halogen reduction device is used.</p> <p>Small Device = A small control device (defined in § 63.2550) is not being used.</p> <p>Designated Hal = The emission stream is not designated as halogenated.</p> <p>Prior Eval = The data from a prior evaluation or assessment is used.</p> <p>Determined Hal = The emission stream is determined to be non-halogenated.</p> <p>Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested.</p> <p>Formaldehyde = The stream does not contain formaldehyde.</p> <p>Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.</p> <p>Bypass Line = Bypass lines are monitored by flow indicators.</p> <p>CEMS = A CEMS is not used.</p> <p>SS Device Type = Combustion device other than an incinerator, boiler or process heater.</p>
GRP-VENTS2	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
GRP-VENTS2	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
GRP-VENTS3	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = A continuous emissions monitoring system (CEMS) capable of measuring the opacity of emissions is installed in the vent in accordance with 30 TAC § 111.111(a)(1)(C).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
GRP-VENTS4	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
GRP-VENTS5	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
GRP-VENTS5	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRP-VENTS6	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p>
GRP-VENTS7	30 TAC Chapter 111, Visible Emissions	111A-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
GRP-VENTS7	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
GRP-VENTS8	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-VENTS9	30 TAC Chapter 115, Vent Gas Controls	115B-1	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Chiller or catalytic incinerator.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p>
GRP-DISTILL1	40 CFR Part 60, Subpart NNN	60NNN-1	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.</p> <p>Subpart NNN Control Device = Catalytic incinerator.</p> <p>Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p>
GRP-DISTILL2	40 CFR Part 60, Subpart NNN	60NNN-1	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>Subpart NNN Control Device = Catalytic incinerator.</p> <p>Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p>
GRP-DISTILL3	40 CFR Part 60, Subpart NNN	60NNN-1	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate less than 0.008 scm/min.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-DISTILL4	40 CFR Part 60, Subpart NNN	60NNN-1	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate less than 0.008 scm/min.</p>
GRP-DISTILL5	40 CFR Part 60, Subpart NNN	60NNN-1	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Distillation unit that is designed and operated as a batch operation.</p>
GRP-DISTILL6	40 CFR Part 60, Subpart NNN	60NNN-1	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>Vent Type = Vent is not regulated by Subpart NNN.</p>
GRP-WASTE1	30 TAC Chapter 115, Industrial Wastewater	115B-1	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Control device other than a carbon adsorber, condenser, catalytic incinerator, enclosed non-catalytic combustion device, flare, steam stripper or vapor combustor.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>
11-1-R180	30 TAC Chapter 117, Subchapter B	117B-1	<p>Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.340(a) or 117.440(a)</p> <p>Maximum Rated Capacity = MRC is greater than 40 MMBtu/hr but less than 100 MMBtu/hr</p> <p>CO Emission Limitation = Complying with 30 TAC § 117.310(c)(1)</p> <p>NO_x Emission Limitation = Complying with 30 TAC § 117.310(a)(16)</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1)</p> <p>NO_x Reduction = No NO_x reduction method</p> <p>NO_x Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1)</p>
GRP-REACTORS1	40 CFR Part 60, Subpart III	60III-1	<p>Construction/Modification Date = After October 21, 1983.</p> <p>Affected Facility = Combination of two or more air oxidation reactors and common recovery systems into which their vent streams are discharged.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			TRE Index Value = TRE index value is not calculated or claimed for exemption in 40 CFR § 60.610(c). Control Device = Catalytic incinerator is used to comply with TOC emission limits.
GRP-REACTORS2	40 CFR Part 60, Subpart RRR	60RRR-1	Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater. Construction/Modification Date = After June 29, 1990. Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured. Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged. TOC Exemption = Concentration of TOC, less methane and ethane, in the vent stream is less than 150 ppmv as measured by Method 25A. Recovery Device = Absorber used as the final recovery device. Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve. Organic Monitoring Device = A recovery device specific monitoring device is used to demonstrate compliance with the TRE index value limit of § 60.702(c). TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2). TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.
GRP-REACTORS3	40 CFR Part 60, Subpart RRR	60RRR-1	Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = On or before June 29, 1990.
GRP-REACTORS4	40 CFR Part 60, Subpart RRR	60RRR-1	Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = After June 29, 1990. Affected Facility Type = Combination of two or more reactor processes and the common recovery system into which their vent streams are discharged. Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve. TRE Index Value = TRE index value is greater than 8.0. TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.
GRP-DRYER	30 TAC Chapter 117, Subchapter B	117B-1	Unit Type = Kiln, dryer or oven other than a lime kiln, lightweight aggregate kiln or magnesium chloride fluidized bed dryer.
GRP-DRYER	40 CFR Part 60, Subpart PP	60PP-1	Construction Date = On or before February 4, 1980.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-ANONE	40 CFR Part 63, Subpart FFFF	63FFFF-1	<p>>1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr.</p> <p>Ammonium Sulfate = The MCPU does not include the manufacture of ammonium sulfate as a by-product, or the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less.</p> <p>Startup 2003 = The affected source startup was before November 10, 2003.</p> <p>Other Operations = The MCPU includes operations other than those listed in § 63.2435(c).</p> <p>Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63.</p> <p>63.100 CMPU = The MCPU is not a CMPU defined in § 63.100.</p> <p>New Source = The MCPU is an existing affected source.</p> <p>PUG = The MCPU is not part of a process unit group (PUG).</p> <p>G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr.</p> <p>Startup 2002 = The affected source initial startup was before April 4, 2002.</p> <p>PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7.</p> <p>Batch Process Vents = The source does not include batch process vents.</p>
GRP-CAPRO	40 CFR Part 63, Subpart FFFF	63FFFF-1	<p>>1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr.</p> <p>Ammonium Sulfate = The MCPU includes the manufacture of ammonium sulfate as a by-product, and the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less.</p> <p>Startup 2003 = The affected source startup was before November 10, 2003.</p> <p>Other Operations = The MCPU includes operations other than those listed in § 63.2435(c).</p> <p>Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63.</p> <p>63.100 CMPU = The MCPU is not a CMPU defined in § 63.100.</p> <p>New Source = The MCPU is an existing affected source.</p> <p>PUG = The MCPU is not part of a process unit group (PUG).</p> <p>G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr.</p> <p>Startup 2002 = The affected source initial startup was before April 4, 2002.</p> <p>PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7.</p> <p>Batch Process Vents = The source does not include batch process vents.</p>

* - The "unit attributes" or operating conditions that determine what requirements apply

NSR vs. Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 1445A	Issuance Date: 01/28/2016
Authorization No.: 1733A	Issuance Date: 07/24/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.492	Version No./Date: 03/14/1997

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the

Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: 11-1-D156A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: The closed vent system shall be designed and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.	
Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.	

Unit/Group/Process Information	
ID No.: 11-1-D156A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: The closed vent system shall have visual inspections.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and a recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.</p>	

Unit/Group/Process Information	
ID No.: 12-1-35	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall report a deviation or perform Test Method 9 and opacity shall not exceed 20%.	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: 14-1-BENZLD	
Control Device ID No.: 14-1-S260	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115C-1
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Liquid absorbent temperature	
Minimum Frequency: Continuous	
Averaging Period: 1 hr.	
Deviation Limit: Maximum absorbent temperature shall not exceed 60 degrees C.	
Basis of monitoring: The option to monitor the liquid absorbent temperature and liquid absorbent flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: 14-1-BENZLD	
Control Device ID No.: 14-1-S260	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115C-1
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Absorbent flow rate	
Minimum Frequency: Continuous	
Averaging Period: 1 hr.	
Deviation Limit: Minimum absorbent flow rate shall not be below 6850 lbs/hr.	
Basis of monitoring: The option to monitor the liquid absorbent temperature and liquid absorbent flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: 14-1-D210A	
Control Device ID No.: CVS	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart Y	SOP Index No.: 61Y-1
Pollutant: BENZENE	Main Standard: [G]§ 61.271(c)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: The closed vent system shall be designed and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p>	

Unit/Group/Process Information	
ID No.: 14-1-D210A	
Control Device ID No.: CVS	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart Y	SOP Index No.: 61Y-1
Pollutant: BENZENE	Main Standard: [G]§ 61.271(c)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Visually inspect all components of the vapor collection system for defects, such as cracks, holes, gaps, loose connections, or broken or missing covers or other closure devices, that could result in air emissions.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and a recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.</p>	

Unit/Group/Process Information	
ID No.: 14-1-D210A	
Control Device ID No.: 14-1-S260	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart Y	SOP Index No.: 61Y-1
Pollutant: BENZENE	Main Standard: [G]§ 61.271(c)
Monitoring Information	
Indicator: Absorbent flow rate	
Minimum Frequency: Continuous	
Averaging Period: 1 hr.	
Deviation Limit: Minimum absorbent flow rate shall not be below 6850 lbs/hr.	
Basis of monitoring: The option to monitor the liquid absorbent temperature and liquid absorbent flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: 14-1-D210A	
Control Device ID No.: 14-1-S260	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart Y	SOP Index No.: 61Y-1
Pollutant: BENZENE	Main Standard: [G]§ 61.271(c)
Monitoring Information	
Indicator: Liquid absorbent temperature	
Minimum Frequency: Continuous	
Averaging Period: 1 hr.	
Deviation Limit: Maximum absorbent temperature shall not exceed 60 degrees C.	
Basis of monitoring: The option to monitor the liquid absorbent temperature and liquid absorbent flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: 14-1-V310B	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall report a deviation or perform Test Method 9 and opacity shall not exceed 20%.	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: 7-1-BENZLD	
Control Device ID No.: 7-1-S300	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115C-1
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Absorbent flow rate	
Minimum Frequency: Continuous	
Averaging Period: 1 hr.	
Deviation Limit: Minimum absorbent flow rate shall not be below 5250 lbs/hr.	
<p>Basis of monitoring:</p> <p>The option to monitor the liquid absorbent temperature and liquid absorbent flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.</p>	

Unit/Group/Process Information	
ID No.: 7-1-BENZLD	
Control Device ID No.: 7-1-S300	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115C-1
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Liquid absorbent temperature	
Minimum Frequency: Continuous	
Averaging Period: 1 hr.	
Deviation Limit: Maximum absorbent temperature shall not exceed 60 degrees C.	
Basis of monitoring: The option to monitor the liquid absorbent temperature and liquid absorbent flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: 7-1-D745A1	
Control Device ID No.: CVS	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart Y	SOP Index No.: 61Y-1
Pollutant: BENZENE	Main Standard: [G]§ 61.271(c)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: The closed vent system shall be designed and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.	
Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.	

Unit/Group/Process Information	
ID No.: 7-1-D745A1	
Control Device ID No.: CVS	Control Device Type: Vapor Collection System
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart Y	SOP Index No.: 61Y-1
Pollutant: BENZENE	Main Standard: [G]§ 61.271(c)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per year	
Averaging Period: n/a	
Deviation Limit: Visually inspect all components of the vapor collection system for defects, such as cracks, holes, gaps, loose connections, or broken or missing covers or other closure devices, that could result in air emissions.	
<p>Basis of monitoring:</p> <p>It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and a recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.</p>	

Unit/Group/Process Information	
ID No.: 7-1-D745A1	
Control Device ID No.: 7-1-S300	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart Y	SOP Index No.: 61Y-1
Pollutant: BENZENE	Main Standard: [G]§ 61.271(c)
Monitoring Information	
Indicator: Absorbent flow rate	
Minimum Frequency: Continuous	
Averaging Period: 1 hr.	
Deviation Limit: Minimum absorbent flow rate shall not be below 5250 lbs/hr.	
<p>Basis of monitoring:</p> <p>The option to monitor the liquid absorbent temperature and liquid absorbent flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.</p>	

Unit/Group/Process Information	
ID No.: 7-1-D745A1	
Control Device ID No.: 7-1-S300	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 40 CFR Part 61, Subpart Y	SOP Index No.: 61Y-1
Pollutant: BENZENE	Main Standard: [G]§ 61.271(c)
Monitoring Information	
Indicator: Liquid absorbent temperature	
Minimum Frequency: Continuous	
Averaging Period: 1 hr.	
Deviation Limit: Maximum absorbent temperature shall not exceed 60 degrees C.	
Basis of monitoring: The option to monitor the liquid absorbent temperature and liquid absorbent flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: GRP-VENTS3	
Control Device ID No.: N/A	Control Device Type: Unknown CD Type
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or a Test Method 9 may be performed and opacity shall not exceed 30%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: GRP-VENTS4	
Control Device ID No.: N/A	Control Device Type: Unknown CD Type
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or a Test Method 9 may be performed and opacity shall not exceed 30%.	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: GRP-VENTS5	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111A-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or a Test Method 9 may be performed and opacity shall not exceed 30%.	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 02/13/2017.

Site rating: 3.20 / Satisfactory Company rating: 4.71 / Satisfactory

(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55 ; Unsatisfactory > 55)

2. Has the permit changed on the basis of the compliance history or site/company rating?No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?No

2. Is a compliance plan and schedule included in the permit?No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes

OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes

OP-UA3 - Storage Tank/Vessel Attributes

OP-UA4 - Loading/Unloading Operations Attributes

OP-UA5 - Process Heater/Furnace Attributes

OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes

OP-UA7 - Flare Attributes

OP-UA8 - Coal Preparation Plant Attributes

OP-UA9 - Nonmetallic Mineral Process Plant Attributes

OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes

OP-UA11 - Stationary Turbine Attributes

OP-UA12 - Fugitive Emission Unit Attributes

OP-UA13 - Industrial Process Cooling Tower Attributes

OP-UA14 - Water Separator Attributes

OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes

OP-UA16 - Solvent Degreasing Machine Attributes

OP-UA17 - Distillation Unit Attributes

OP-UA18 - Surface Coating Operations Attributes

OP-UA19 - Wastewater Unit Attributes

OP-UA20 - Asphalt Operations Attributes

OP-UA21 - Grain Elevator Attributes

OP-UA22 - Printing Attributes

OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes

OP-UA25 - Synthetic Fiber Production Attributes

OP-UA26 - Electroplating and Anodizing Unit Attributes

OP-UA27 - Nitric Acid Manufacturing Attributes

OP-UA28 - Polymer Manufacturing Attributes

OP-UA29 - Glass Manufacturing Unit Attributes

OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes

OP-UA31 - Lead Smelting Attributes

OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes

OP-UA33 - Metallic Mineral Processing Plant Attributes

OP-UA34 - Pharmaceutical Manufacturing

OP-UA35 - Incinerator Attributes

OP-UA36 - Steel Plant Unit Attributes

OP-UA37 - Basic Oxygen Process Furnace Unit Attributes

OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes

OP-UA39 - Sterilization Source Attributes

OP-UA40 - Ferroalloy Production Facility Attributes

OP-UA41 - Dry Cleaning Facility Attributes

OP-UA42 - Phosphate Fertilizer Manufacturing Attributes

OP-UA43 - Sulfuric Acid Production Attributes

OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes

OP-UA45 - Surface Impoundment Attributes

OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes

OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes